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Short Communications

Northern Harrier Casts Pellet While in Flight

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To my knowledge there has never been any mention of a raptor casting a pellet while in flight, but on 1 June 1986 at 0825 H on the Buena Vista Marsh in central Wisconsin I watched an adult male Northern Harrier (*Circus cyaneus*) cast a pellet while flying. He was hunting over open grassland and as he passed above an active harrier nest, he began to circle and climb until it reached a height of about 30 m. The adult female, previously color-marked, returned to the nesting area. The Harriers circled each other for approximately 30 seconds and then the female flew directly to the nest. Once she had landed, the male continued to hunt. As he flew past me, I noticed that he was not carrying anything in his talons or beak. As he continued to traverse the field, he appeared to stall in the air only 20 m from me; his wings were fully extended and tilted backwards so that they caught the wind and held the hawk motionless in the air for about 3 seconds. While the bird was stationary, I trained my binoculars on him and watched as he seemed to be trying to force something out of his crop with a series of three muscular contractions. With each contraction, the harrier lowered his head toward his breast—apparently trying to dislodge an obstruction. By the third contraction, he opened his mouth and cast a pellet. He then continued to hunt.

Resumen.—Un *Circus cyaneus* macho disminuyó la velocidad de su vuelo, vomitó residuos no digeribles en un fragmento de su vuelo y continuó en su afán de cacería.
[Traducción de Eudoxio Paredes-Ruiz]

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Above-ground Nesting by Burrowing Owls

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While most Burrowing Owls (*Athene cunicularia*) occupy "typical" burrows (i.e., underground and either excavated or expanded by an owl), some exceptions have been observed. Stoner (1933) described Burrowing Owls occupying cavities that had been dug into haystacks. Brotherton and Brotherton (in Williams 1986) reported a Burrowing Owl living in a section of pipe that was in use as a parking lot barrier. Neither report involved nesting birds. Here I present an account of Burrowing Owls nesting and incubating eggs outside of burrows.

I observed three Burrowing Owl nests above ground at Tamiami Airport, Kendall, Dade Co., Florida. I discovered these nests on 16 April, 11 May, and 17 May 1987. Each nest was a near-circular scrape in a section of maintained lawn (Table 1). Two nests (1 and 2) were lined with debris and all contained at least one egg (Table 1). Egg dimensions were similar to those reported by Bent (1938) for Florida Burrowing Owls. I observed incubating adult owls at each nest. No eggs hatched, and all nests were eventually abandoned.

Table 1. Burrowing Owl nest and egg dimensions from three above-ground nests, Dade Co., Florida, 1987.

NEST DIMENSIONS (mm)		EGG DIMENSIONS (mm)[1]	
NEST	(L × W × D)	EGGS	(L × W)
1	167 × 148 × 27	1	34 × 24[2]
2	216 × 199 × 17	4	30.0 × 24.7
			31.3 × 25.8
			28.0 × 23.4
3	155 × 150 × 19	4	32.8 × 26.4

[1] Measurements were taken following nest abandonment. Some eggs were missing at that time.
[2] Estimated with ruler, all other eggs measured with calipers.

It is unlikely that these nests were established in response to soil conditions. I observed eight active and four inactive burrows in the sections of lawn (ca. 19 ha total area) containing the above-ground nests. The entrance to one active burrow was within 2.5 m of nest 3. This suggests that soil under the nests was favorable for burrows.

Burrowing Owls nesting above ground lose the thermoregulatory and predator avoidance benefits conferred by burrows. Humidity within a burrow is greater than humidity outside a burrow, resulting in reduced water loss in adult owls (Coulombe 1971). Adults, chicks, and eggs in above-ground nests would be exposed to higher desiccation levels than would their subterranean counterparts. Burrows also provide a place to retreat from enemies (Thomsen 1971). Above-ground nesting owls have no equivalent refuge from predators. While adult owls could escape via flight, eggs and pre-fledged chicks would be susceptible to predation. Successful nesting, therefore, is less likely to occur above ground than in a burrow. The cause of this unusual and unsuccessful nesting behavior remains unknown.

RESUMEN.—Tres nidos de *Athene cunicularia* han sido hallados en la superficie, sobre el cuidado césped en Florida. Las condiciones disponibles no impedía a los buhos para hacer sus nidos subterráneos, por que madrigueras ocupadas por otros buhos y algunas madrigueras vacías habían en la vecindad. Los tres nidos sobre la superficie estaban abandonados con 9 huevos sin incubar. Las causas de este raro hábito de los buhos para anidar sobre el suelo, son desconocidas.

[Traducción de Eudoxio Paredes-Ruiz]

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EAGLE OWL (*Bubo bubo*) PREDATION ON JUVENILE BONELLI'S EAGLES (*HIERAAETUS FASCIATUS*)

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The predation of diurnal birds of prey by the Eagle Owl (*Bubo bubo*) is well known. Mikkola (1983) lists 18 species of raptors taken. Glutz von Blotzeim and Bauer (1980) maintain that diurnal raptors can represent up to 5.4% of the Eagle Owl's diet. None of these authors mention the presence of Bonelli's Eagle (*Hieraaetus fasciatus*) in the diet of the Eagle Owl, although the two species are sympatric in the Mediterranean region and occupy very similar habitats. In this context, Blondel and Badan (1976) state that Eagle Owls do not interfere with Bonelli's Eagles, even when they breed nearby. In contrast, Bayle (1987) mentions a case of possible predation on a Bonelli's Eagle young, nearly fledged whose remains were found in an Eagle Owl nest in France. Other raptors of similar or